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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,598	09/26/2003	Donald T. Cronic	84333	6810

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EXAMINER
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BELL, BRUCE F

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/675,598

**Applicant(s)**

CRONCE, DONALD T.

**Examiner**

Bruce F. Bell

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/26/03</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis (6,123,069).

Davis discloses an oxygen breathing system with programmed oxygen delivery. See title. The system is a self contained oxygen breathing apparatus having a source of oxygen. Possible sources are set forth as being chlorates and perchlorates of lithium, sodium, and potassium, peroxides of sodium and potassium, superoxides of alkali metals and sodium percarbonate. All of the possible sources of oxygen when introduced with water or water vapor, produces oxygen and a reaction which is exothermic in nature. See col. 1, lines 31-64.

The prior art of Davis anticipates the applicants instant claims as set forth by way of the disclosure above. The above oxygen sources when placed in contact with water produced oxygen and an exothermic reaction, which is considered to be an energy source, since the production of oxygen and an exothermic reaction is a form of energy. The same materials as are used in applicants instant claims are used in the Davis patent and therefore, the instant claims as set forth are anticipated.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Russell (4,867,902).

Russell discloses a micro-encapsulated formulations of an oxygen generating compound such as that of potassium peroxide and superoxide. The micro-encapsulated compound provides products with controllable reactivity which generate less exothermic heat when mixed with water. See col. 1, lines 5-10. Potassium superoxide reacts with water to produce oxygen and hydrated potassium hydroxide. See col. 1, lines 31-33. The potassium superoxide produces enough exothermic heat to require external heat exchangers. See col. 1, lines 46-49. The potassium superoxide material is difficult to handle because its reaction with water is extremely fast and uncontrollable. See col. 1, lines 50-52. The potassium superoxide is required to be made into compressed blocks in order to control the rate of reaction, and to slow the diffusion of moisture into the chemical and extend the oxygen delivery time. See col. 1, lines 53-59. Russell discloses that by micro-encapsulation, that extremely rapid reaction of the alkali metal superoxide can be slowed. See col. 3, lines 66-68. Other chemicals which can release oxygen by reaction with water and which can be micro-encapsulated are those of alkali and

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alkaline earth metal peroxides, superoxides, trioxides, percarbonates and permanganates. See col. 4, lines 31-35 and 51-55.

The prior art of Russell anticipates the applicants instant invention as shown by way of the disclosure about with respect to the instant claims as set forth. The prior art portion of Russell discloses that it is set forth that decomposition of peroxides, superoxides and percarbonates, etc by reacting with water is known in the art and that this decomposition is known to cause an exothermic reaction to produce oxygen. The production of the exothermic heat and oxygen is considered to be a form of energy that can be used. Therefore, the prior art of Russell anticipates the applicants instant invention as set forth in the instant claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Weber (4598552).

Weber discloses an energy source for a closed cycle engine. See abstract. A chemical energy source wherein heat is generated by exothermic chemical reactions and converted into power. See Field of the Invention. A body of material exothermically reactive with another material to produce a readily soluble compound and hydrogen is located in the reaction chamber and an oxygen inlet is provided to the working fluid

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chamber. The body of material is decomposable in the presence of another material to generate oxygen and a readily soluble compound. An exothermic reaction between the body of material therein and the another material to generate hydrogen in the reaction chamber, as well as to provide the storage vessel with the another material to generate and drive oxygen to the reaction chamber to cause an exothermic reaction between the hydrogen generated therein and the oxygen is set forth. The exothermic reactions heat the working fluid in the working fluid chamber. The reaction chamber in the storage vessel are readily prepared for reuse by introducing a solvent for the reaction products respectively found therein. See col. 2, lines 22-45. An exothermic reactive material of lithium is in the reaction chamber and the fluid reactive with the lithium is water and the decomposable material is a superoxide of an alkali metal superoxide. See col. 2, lines 53-61 and col. 4, lines 29 – col. 5, line 3.

The prior art of Weber anticipates the applicants instant invention as shown by way of the disclosure to Weber above with respect to the instant claims as presented.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BFB  
July 14, 2006



Bruce F. Bell  
Primary Examiner  
Art Unit 1746